AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for facilitating maintaining connectivity between a mobile network node and a correspondent node after the mobile network node changes ~~addresses~~ a first address to a second address, the second address being different than the first address, the method comprising performing, by the mobile node, the steps of:

registering [[an]] the second address, for the mobile node, with an authoritative name server without using a home agent, wherein the registering step comprises:

specifying ~~a current~~ the second address for the mobile node, and

specifying a supplementary value that ensures the ~~current~~ second address will not be cached within non-authoritative name servers.

2. (Currently amended) The method of claim 1 further comprising the steps performed by the mobile node of:

connecting to a new network location;

receiving [[a]] the second ~~network~~ address differing from the ~~current~~ first address previously registered with the authoritative name server;

registering the second ~~network~~ address with the authoritative name server; and

issuing a first binding update to a correspondent node to which a connection was previously created while the mobile node resided at the first ~~network~~ address, wherein a specified destination address for the first binding update specifies a first correspondent node address.

3. (Original) The method of claim 2 further comprising the steps of.

receiving, by the mobile node, a binding update acknowledgement from the correspondent node; and

restoring a disrupted connection between the mobile node and correspondent node.

4. (Original) The method of claim 2 wherein the mobile node performs the further steps of:

registering a binding update failure with regard to the first binding update issued to the correspondent node at the first correspondent node address; and

issuing a naming query requesting a current address of the correspondent node.

5. (Original) The method of claim 4 further comprising the steps performed by the mobile node of.

receiving a naming query response to the naming query including a second correspondent node address for the correspondent node that differs from the first correspondent node address; and

issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address.

6. (Currently amended) The method of claim 2 wherein the new network location resides outside a home network of the mobile node, and wherein the method comprises the further step of:

establishing a tunnel connection between the mobile node and a virtual private network server;

receiving, by the mobile node, a local network address specified by the virtual private network server, wherein the second ~~network~~ address corresponds to the local network address.

7. (Original) The method of claim 2 further comprising the step of.

initiating, by the mobile node, a binding connection through a rendezvous server residing outside the home network.

8. (Previously presented) The method of claim 1~~:~~

wherein specifying the supplementary value comprises specifying a time-to-live (TTL) value of zero.

9. (Previously presented) The method of claim 2 further comprising:

issuing a naming query requesting a current address of the correspondent node, before receiving a response to the first binding update;

receiving a naming query response to the naming query including a second correspondent node address for the correspondent node;

determining that the second correspondent node address differs from the first correspondent node address; and

issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address.

10. (Previously presented) The method of claim 1 wherein the authoritative name server is a domain name system (DNS) server.

11. (Currently amended) A computer-readable medium including computer-executable instructions for facilitating maintaining connectivity between a mobile network node and a correspondent node after the mobile network node changes ~~addresses~~ a first address to a second address, the second address being different than the first address, the computer-executable instructions facilitating performing, by the mobile node, the steps [[of.]] of:

registering [[an]] the second address, for the mobile node, with an authoritative name server without using a home agent, wherein the registering step comprises:

specifying ~~a current~~ the second address for the mobile node, and

specifying a supplementary value that ensures the ~~current~~ second address will not be cached within non-authoritative name servers.

12. (Currently amended) The computer-readable medium of claim 11 further comprising computer-executable instructions for performing, by the mobile node, the steps of

connecting to a new network location;

receiving [[a]] the second ~~network~~ address differing from the ~~current~~ first address previously registered with the authoritative name server;

registering the second ~~network~~ address with the authoritative name server; and

issuing a first binding update to a correspondent node to which a connection was previously created while the mobile node resided at the first ~~network~~ address, wherein a specified destination address for the first binding update specifies a first correspondent node address.

13. (Currently amended) The computer-readable medium of claim 12 further comprising computer-executable instructions for performing the steps of:

receiving, by the mobile node, a binding update acknowledgement from the [[25]] correspondent node; and

restoring a disrupted connection between the mobile node and correspondent node.

14. (Original) The computer-readable medium of claim 12 further comprising computer-executable instructions for performing, by the mobile node, the further steps of:

registering a binding update failure with regard to the first binding update issued to the correspondent node at the first correspondent node address; and

issuing a naming query requesting a current address of the correspondent node.

15. (Original) The computer-readable medium of claim 14 further comprising computer-executable instructions for performing, by the mobile node, the steps of:

receiving a naming query response to the naming query including a second correspondent node address for the correspondent node that differs from the first correspondent node address; and

issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address.

16. (Currently amended) The computer-readable medium of claim 12 wherein the new network location resides outside a home network of the mobile node, and further comprising computer-executable instructions for facilitating performing the steps of:

establishing a tunnel connection between the mobile node and a virtual private network server; and

receiving, by the mobile node, a local network address specified by the virtual private network server, wherein the second ~~network~~ address corresponds to the local network address.

17. (Original) The computer-readable medium of claim 12 further comprising computer-executable instructions for:

initiating, by the mobile node, a binding connection through a rendezvous server residing outside the home network.

18. (Previously presented) The computer-readable medium of claim 11 wherein specifying the supplementary value comprises specifying a time-to-live (TTL) value of zero.

19. (Previously presented) The computer-readable medium of claim 12 further comprising computer-executable instructions for:

issuing a naming query requesting a current address of the correspondent node, before receiving a response to the first binding update;

receiving a naming query response to the naming query including a second correspondent node address for the correspondent node;

determining that the second correspondent node address differs from the first correspondent node address; and

issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address.

20. (Previously presented) The computer-readable medium of claim 11 wherein the authoritative name server is a domain name system (DNS) server.

21. (Currently amended) A mobile network node facilitating maintaining connectivity with a correspondent node after changing network addresses, the mobile network node including a communications protocol stack comprising computer-executable instructions for facilitating maintaining connectivity between a mobile network node and a correspondent node after the mobile

network node changes ~~addresses~~ a first address to a second address, the second address being different than the first address, the computer-executable instructions facilitating performing, by the mobile node, the steps of:

determining, via a policy maintained by the mobile node, that the mobile node is located outside a security domain of a home network of the mobile node;

establishing a virtual private network tunnel connection through a virtual private network server, an address of the virtual private network server being specified by the policy;

receiving, from the virtual private network server, the second address for the mobile node;

registering [[an]] the second address~~, for the mobile node,~~ with an authoritative name server without using a home agent, wherein the registering step comprises:

specifying ~~a current~~ the second address for the mobile node, and

specifying a supplementary value that ensures the ~~current~~ second address will not be cached within non-authoritative name servers.

22. (Currently amended) The mobile network node of claim 21 further comprising computer-executable instructions for performing, by the mobile node, the steps of:

connecting to a new network location; and

~~receiving a second network address differing from the current address previously registered with the authoritative name server;~~

~~registering the second network address with the authoritative name server; and~~

issuing a first binding update to a correspondent node to which a connection was previously created while the mobile node resided at the first ~~network~~ address, wherein a specified destination address for the first binding update specifies a first correspondent node address.

23. (Original) The mobile network node of claim 22 further comprising computer-executable instructions for performing the steps of:

receiving, by the mobile node, a binding update acknowledgement from the correspondent node; and

restoring a disrupted connection between the mobile node and correspondent node.

24. (Original) The mobile network node of claim 22 further comprising computer-executable instructions for performing, by the mobile node, the further steps of:

registering a binding update failure with regard to the first binding update issued to the correspondent node at the first correspondent node address; and

issuing a naming query requesting a current address of the correspondent node.

25. (Original) The mobile network node of claim 24 further comprising computer-executable instructions for performing, by the mobile node, the steps of.

receiving a naming query response to the naming query including a second correspondent node address for the correspondent node that differs from the first correspondent node address; and

issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address.

26. (Cancelled)

27. (Original) The mobile network node of claim 22 further comprising computer-executable instructions for:

initiating, by the mobile node, a binding connection through a rendezvous server residing outside the home network.

28. (Previously presented) The mobile network node of claim 21 wherein specifying the supplementary value comprises specifying a time-to-live (TTL) value of zero.

29. (Previously presented) The mobile network node of claim 22 further comprising computer-executable instructions for:

issuing a naming query requesting a current address of the correspondent node, before receiving a response to the first binding update;

receiving a naming query response to the naming query including a second correspondent node address for the correspondent node;

determining that the second correspondent node address differs from the first correspondent node address; and

issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address.

30. (Previously presented) The mobile network node of claim 21 wherein the authoritative name server is a domain name system (DNS) server.